Pesticides And Toxic Substances (H-7506C)



The federal Endangered Species Act is intended to protect and promote the recovery of animals and plants that are in danger of becoming extinct due to human activities. Under the Act, the U.S. Environmental Protection Agency (U.S. EPA) must ensure that the use of pesticides it registers will not result in harm to the species listed as endangered or threatened by the U.S. Fish and Wildlife Service, or to habitat critical to those species' survival. This program will protect endangered and threatened species from harm due to pesticide use.

The information provided in this bulletin is similar to what U.S. EPA expects to distribute once the Endangered Species Protection Program is in effect. Individuals who use pesticides during this interim period are not legally required to comply with these suggested measures. At the present time, compliance with the requirements specified on the pesticide product labeling will satisfy all legal requirements regarding pesticides and endangered species protection. While these pesticide use conditions do not yet have the force of law, they are being provided now for your use in voluntarily protecting endangered and threatened species.

Your comments are needed regarding the information presented in this publication. Please contact us to let us know whether the information is clear and correct. Also tell us to what extent following the recommended measures would affect your pesticide use program. This information will be considered by U.S. EPA during the final stages of program development.

Please submit comments to:
DPR Pesticide Registration Branch
830 K Street
Sacramento, CA 95814
(916) 324-3881
rmarovich@cdpr.ca.gov
This document is available online:
http://www.cdpr.ca.gov/docs/es/index.htm



This publication contains a map of the county including a shaded area where pesticide use should be limited to protect listed species. In the Section List, you will find additional information on the individual species that occur in each section, indexed by county, township, range and section.

The Species Descriptions table lists the taxonomic groups for each species. The Active Ingredients tables list certain pesticides and the activity category (mode of action, etc.) of the pesticide and the taxonomic groups they could adversely affect. The use limitations in this bulletin apply only to listed pesticides where the hazard class of the pesticide matches the hazard class (sensitivity of the taxonomic group) of the species that occur in the section where the pesticide will be used. Within a given section, use limitations only apply to sites that are consistent with habitat as noted in the Species Descriptions table. The Use Limitation Codes table indicates which use limitation codes apply to each species. The Use Limitations table translates limitation codes to use limitations.

Does This Information Apply To You? To determine whether this information applies to your use of a pesticide, review the questions below. The information applies only if you answer "yes" to all three of these questions:

- Do you intend to use pesticides within the shaded area on the map (p 3) that is further detailed in the Section List (p 25)? If so, note the species from the Section List.
- Are any of the ingredients included in your pesticide product named in the Active Ingredients table (p 10)?
- If so, does the hazard class(es) of the pesticide you intend to use match one or more of the taxonomic groups of the species as shown in the Species Descriptions table (p 13)?

If you answer "yes" to all three questions, you should follow the instructions "Worksheet for Fungicides" (p 2) to help protect listed species.

If you answer "no" to any of the above questions, this bulletin does not apply to you.

Fungicides

Worksheet for Fungicides

For each section where you will apply fungicides:

	Is the section inside of the shaded area on the county map (p 3)? Yes (if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)	es () No	()	
2.	Is the section listed in the Section List (p 25)? (if yes, go on to #3, if no, this bulletin does not apply)		Yes ()) No ()	
	Is the active ingredient of the fungicide(s) you intend to use listed in the Active go on to #4 if no, this bulletin does not apply) Yes			· · ·	ე)?

4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

fungicide active ingredient(s) (list each)	Hazard Class	Activity Category
	AQ	f
	(x)	(x)

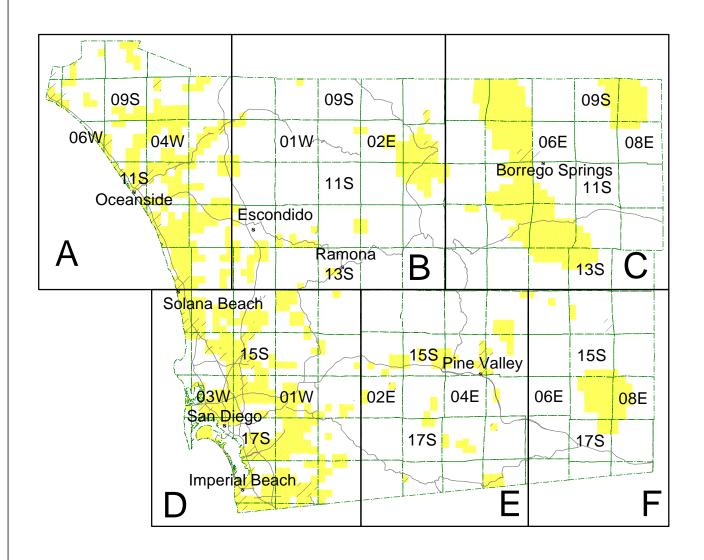
5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 13) and check all that apply.

AQ(x)

- 6. Does one or more hazard class of the fungicide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes () No ()
- 7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each fungicide that you intend to use and check all use limitation codes that apply.

Limitation Codes $10 \ (x) \qquad \qquad 15 \ (x) \qquad \qquad 16 \ (x) \qquad \qquad 17 \ (x)$

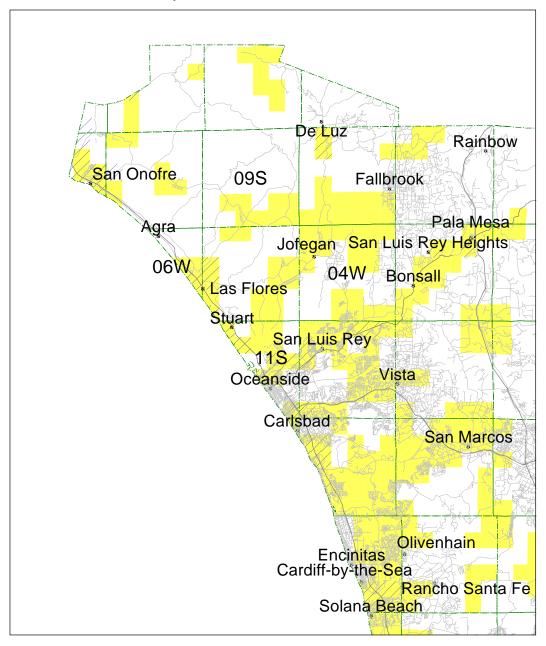
8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 12). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions (p 13) table for each species.



Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

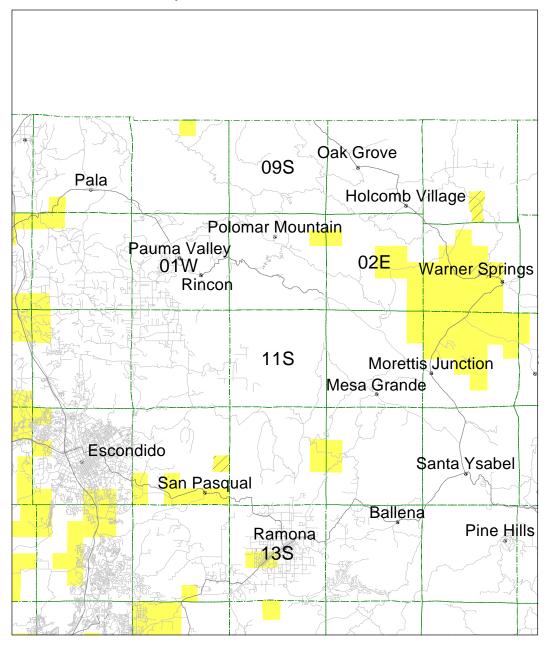
Overview Map



	Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

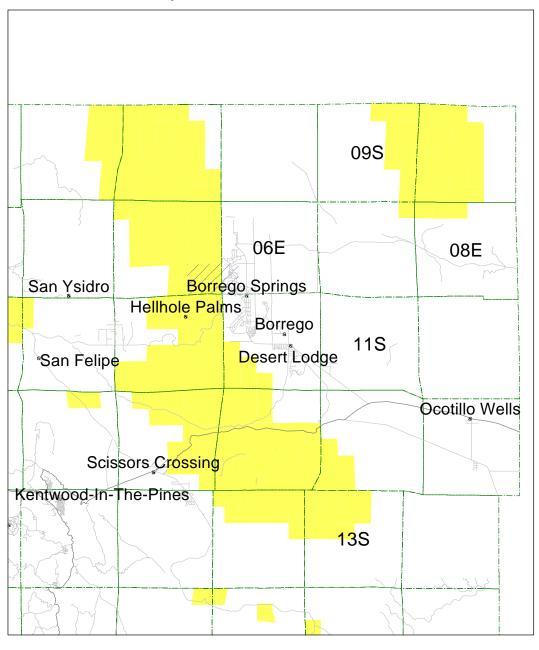
Detail Map A



	Terrestrial Species
	Torrooma opoolog

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

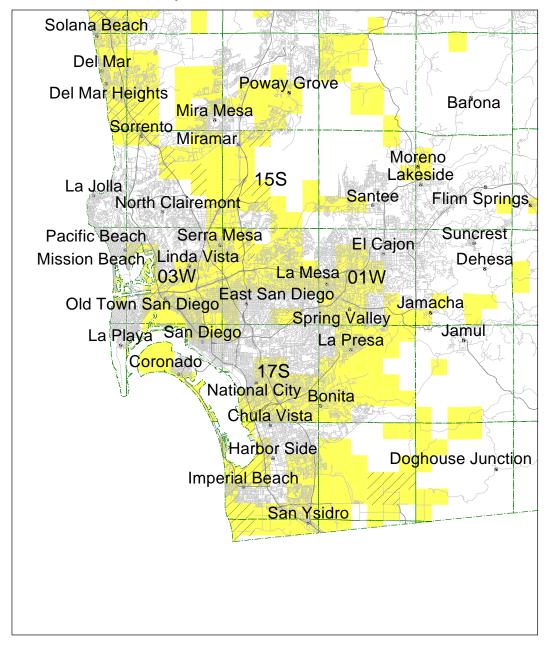
Detail Map B



	Terrestrial Species
	Torrooma opoolog

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

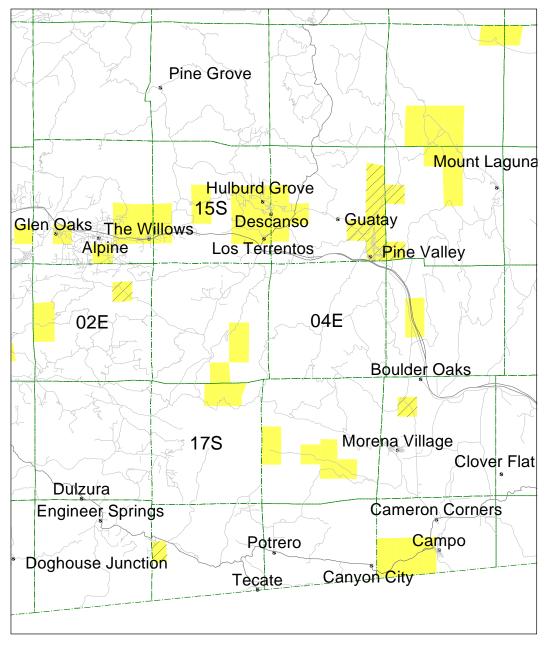
Detail Map C



Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

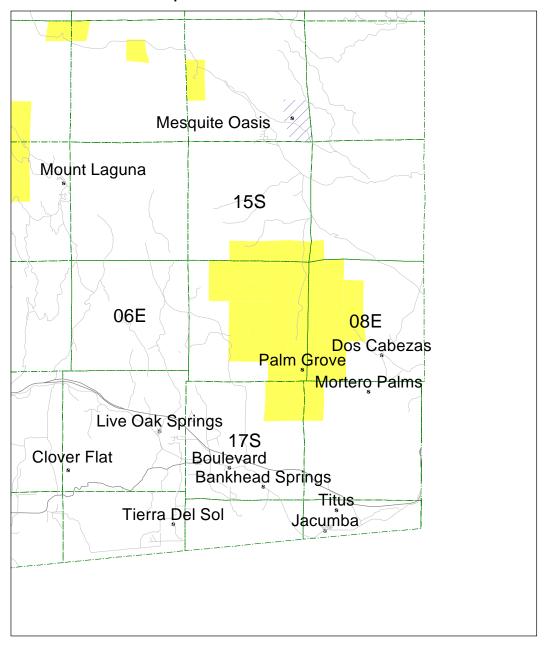
Detail Map D



Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Detail Map E



Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Detail Map F

Active Ingredients (Fungicides)

		Hazard Class
Active Ingredients	Activity Category	Aquatic (AQ)
Azoxystrobin	f	X
Benomyl	f	X
Captan	f	X
Carboxin	f	X
Chlorothalonil	f	X
Copper	f	X
Copper Ammonium Carbonate	f	X
Copper Ammonium Complex	f	X
Copper Hydroxide	f	X
Copper Octanoate	f	X
Copper Oxychloride	f	X
Copper Oxychloride Sulfate	f	X
Copper Salts of Fatty and Rosin Acids	f	X
Copper Sulfate (Basic)	f	X
Copper Sulfate (Pentahydrate)	f	X
Dazomet	f	X
Difenoconazole	f	X
Dimethomorph	f	X
Fenbuconazole	f	X
Fludioxonil	f	X
Mancozeb	f	X
Maneb	f	X
Manganese Sulfate	f	X
Oxythioquinox	f	X
PCNB	f	X
Piperalin	$\int_{\mathbf{f}}^{\mathbf{r}}$	X
Propiconazole	f	X
Tebuconazole	f	X
Thiabendazole	f	X
Thiram	f	X
Triflumizole	f	X
Ziram	f	X
Zineb	f	X

Use Limitation Codes for Fungicides

The following table identifies use limitation codes for the hazard class (AQ) and fungicide activity category (f). Note all applicable codes (10-17). These codes are translated on page 12.

	Insecticide Activity Category	
Hazard Class	f	
AQ	10, 15, 16, 17	

Use Limitations

Limitation
Do not use in currently occupied habitat (see Species Descriptions table for possible exceptions).
Provide a 20 foot minimum strip of vegetation (on which pesticides should not be applied) along rivers, creeks, streams, wetlands, vernal pools and stock ponds or on the downhill side of fields where run-off could occur. Prepare land around fields to contain run-off by proper leveling, etc. Contain as much water "on-site" as possible. The planting of legumes, or other cover crops for several rows adjacent to off-target water sites is recommended. Mix pesticides in areas not prone to run-off such as concrete mixing/loading pads, disked soil in flat terrain or graveled mix pads, or use a suitable method to contain spills and/or rinsate. Properly empty and triple-rinse pesticide containers at time of use.
Conduct irrigations efficiently to prevent excessive loss of irrigation waters through run-off. Schedule irrigations and pesticide applications to maximize the interval of time between the pesticide application and the first subsequent irrigation. Allow at least 24 hours between application of pesticides listed in this bulletin and any irrigation that results in surface run-off into natural waters. Time applications to allow sprays to dry prior to rain or sprinkler irrigations. Do not make aerial applications while irrigation water is on the field unless surface run-off is contained for 72 hours following the application.
For sprayable or dust formulations: when the air is calm or moving away from habitat, commence applications on the side nearest the habitat and proceed away from the habitat. When air currents are moving toward habitat, do not make applications within 200 yards by air or 40 yards by ground upwind from occupied habitat. The county agricultural commissioner may reduce or waive buffer zones following a site inspection, if there is an adequate hedgerow, windbreak, riparian corridor or other physical barrier that substantially reduces the probability of drift.

ARROYO TOAD



Scientific Name: BUFO MICROSCAPHUS CALIFORNICUS

Federal Status: Endangered

Species Description:

A small (2 to 3 inches), light greenish gray or tan toad with warty skin and dark spots. A light-colored stripe crosses the head and eyelids, and a light area usually occurs on each sacral hump and in the middle of the back.

Photo: Bill Palmer

Habitat Description:

RIVERS WITH SANDY BANKS, WILLOWS, COTTONWOODS, AND SYCAMORES; LOOSE, GRAVELLY AREAS OF STREAMS IN DRIER PARTS OF RANGE. SEMI-ARID REGIONS NEAR WASHES OR INTERMITTENT STREAMS, INCLUDING VALLEY-FOOTHILL AND DESERT RIPARIAN, DESERT WASH, ETC.

Hazard Class: AQ, FS

CALIFORNIA LEAST TERN



Scientific Name: STERNA ANTILLARUM BROWNI (NESTING COLONY)

Federal Status: Endangered

Species Description:

A migratory seabird present from April to September, nesting along expansive stretches of shoreline, feeds on small fish near inshore estuaries, river mouths and shallows.

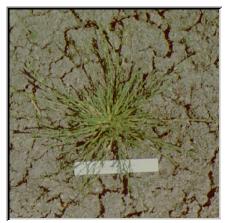
Photo: B. "Moose" Peterson/WRP

Habitat Description:

COLONIAL BREEDER ON BARE OR SPARSELY VEGETATED, FLAT SUBSTRATES: SAND BEACHES, ALKALI FLATS, LAND FILLS, OR PAVED AREAS. NESTS ALONG THE COAST FROM SAN FRANCISCO BAY SOUTH TO NORTHERN BAJA CALIFORNIA.

Hazard Class: AQ, AV

CALIFORNIA ORCUTT GRASS



Scientific Name: ORCUTTIA CALIFORNICA

Federal Status: Endangered

Species Description:

An annual, prostrate, inconspicuous and very rare grass, to 6 inches high. Occurs in the wettest portions of vernal pools but most growth occurs as pools are drying up.

Photo: F. Thomas Griggs

Habitat Description:

15-660M. VERNAL POOLS. KNOWN ONLY FROM SOUTHERN CALIFORNIA AND BAJA.

Hazard Class: PD

COASTAL DUNES MILK-VETCH



Scientific Name: ASTRAGALUS TENER VAR TITI

Federal Status: Endangered

Species Description:

A small annual herb of the pea family with slender stems reaching 4-8 in., compound leaves 0.8 to 2.7 in long with 7 to 11 leaflets, tiny lavender to purple flowers 0.3 in. long seed pods are straight to sickle-shaped and 0.3 to 0.6 in long.

Photo: Brousseau Collection

Habitat Description:

MOIST, SANDY DEPRESSIONS OF BLUFFS OR DUNES ALONG AND NEAR THE PACIFIC OCEAN; ONE SITE ON A CLAY TERRACE. 1-50M. COASTAL BLUFF SCRUB, COASTAL DUNES. KNOWN ONLY FROM A FEW EXTANT OCCURRENCES; MOSTLY HISTORICAL IN SOUTHERN CALIFORNIA.

Hazard Class: PD

DEL MAR MANZANITA



Scientific Name: ARCTOSTAPHYLOS GLANDULOSA SSP

CRASSIFOLIA

Federal Status: Endangered

Species Description:

An erect shrub, generally 3.3 to 4 ft tall, distinguished from similar subspecies by its shorter stature (other subspecies are up to 8.2 ft tall), and by its dark gray-green leaves hairless above fuzzy beneath.

Photo: Brousseau Collection

Arctostaphylos sp.

Habitat Description:

SANDY COASTAL MESAS AND OCEAN BLUFFS; IN CHAPARRAL OR TORREY PINE FOREST. 0-365M. CHAPARRAL, CLOSED-CONE CONIFEROUS FOREST. IN CALIFORNIA, ONLY IN SAN DIEGO COUNTY.

PD

Hazard Class:

DESERT PUPFISH



Scientific Name: CYPRINODON MACULARIUS

Federal Status: Endangered

Species Description:

A 3 inch silvery fish that matures within 2 to 3 months and lives for 6 to 9 months. Tolerates water temperatures up to 104 F and salinity up to three times seawater. During cold winter months, they become dormant and burrow into a muddy substrate.

Photo: B. "Moose" Peterson/WRP

Habitat Description:

CAN LIVE IN SALINITIES FROM FRESH WATER TO 68 PPT, CAN WITHSTAND TEMPS FROM 9 - 45 C & D.O. LEVELS DOWN TO 0.1 PPM. DESERT PONDS, SPRINGS, MARSHES AND STREAMS IN SOUTHERN CALIFORNIA.

Hazard Class: AQ

ENCINITAS BACCHARIS



Scientific Name: BACCHARIS VANESSAE

Federal Status: Threatened

Species Description:

A broom-like shrub of the sunflower family (Asteraceae), 1.6 to 4.3 ft tall; distinguished from other members of the genus by its thread-like leaves.

Photo: Brousseau Collection

Baccharis sp.

Habitat Description:

ON SANDSTONE SOILS IN STEEP, OPEN, ROCKY AREAS WITH CHAPARRAL ASSOCIATES. 60-720M. CHAPARRAL. ENDEMIC TO SAN DIEGO COUNTY.

Hazard Class: PD

LEAST BELL'S VIREO



Scientific Name: VIREO BELLII PUSILLUS (NESTING)

Federal Status: Endangered

Species Description:

A small migratory insectivorous bird, gray above, white-gray beneath, faint white eyebrow and wingbars, white border beneath eye (lower half of eye ring), dark eyeline and eye, thick bill with hooked upper mandible.

Photo: B. "Moose" Peterson

Habitat Description:

NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE. SUMMER RESIDENT OF SOUTHERN CALIF. INHABITS LOW RIPARIAN GROWTH IN VIC OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.

Hazard Class: AV

LIGHT-FOOTED CLAPPER RAIL



Scientific Name: RALLUS LONGIROSTRIS LEVIPES

Federal Status: Endangered

Species Description:

A solitary ground nesting bird up to 19 inches in length, weighing up to 14 ounces. Both sexes with grayish brown to cinnamon brown plumage, darker dorsally than ventrally. Flanks are barred white, dusky, and black.

Photo: B. "Moose" Peterson

Habitat Description:

REQUIRE DENSE GROWTH OF EITHER PICKLEWEED OR CORDGRASS FOR NESTING OR ESCAPE COVER; FEEDS ON MOLLUSCS AND CRUSTACEANS. FOUND IN SALT MARSHES TRAVERSED BY TIDAL SLOUGHS, WHERE CORDGRASS AND PICKLEWEED ARE THE DOMINANT VEGETATION.

Hazard Class: AQ, AV

OTAY MESA MINT



Scientific Name: POGOGYNE NUDIUSCULA

Federal Status: Endangered

Species Description:

A small, aromatic mint that produces whorls of bright purple flowers in May-June.

Photo: Dave Bramlet

Habitat Description:

DRY BEDS OF VERNAL POOLS AND MOIST SWALES W/ERYNGIUM ARISTULATUM VAR PARISHII AND ORCUTTIA CALIFORNICA. 85-250M. VERNAL POOLS. ONLY KNOWN FROM SAN DIEGO COUNTY AND BAJA.

Hazard Class: PD

OTAY TARPLANT



Scientific Name: HEMIZONIA CONJUGENS

Federal Status: Threatened

Species Description:

A glandular, aromatic annual with a branching stem to 10 inches high and deep green or gray-green leaves with soft, shaggy hairs, yellow flower heads with 8 to 10 ray flowers and 13 to 21 disk flowers and hairless or sparingly downy corollas.

Photo: Brousseau Collection

Hemizonia sp.

Habitat Description:

COASTAL PLAINS, MESAS, AND RIVER BOTTOMS; OFTEN IN OPEN, DISTURBED AREAS; CLAY SOILS. 20-300M. COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND. IN CALIFORNIA, KNOWN ONLY FROM SAN DIEGO COUNTY.

Hazard Class: PD

PACIFIC POCKET MOUSE



Scientific Name: PEROGNATHUS LONGIMEMBRIS PACIFICUS

Federal Status: Endangered

Species Description:

A nocturnal granivore with brown, pinkish buff or orange-yellow fur on the back, underside whitish with two small patches of lighter hairs at the base of the ear and bicolored tail, up to 5.2 inches total length and weighing 0.25 to 0.33 ounces.

Photo: Shana Dodd

Habitat Description:

SEEMS TO PREFER SOILS OF FINE ALLUVIAL SANDS NEAR THE OCEAN, BUT MUCH REMAINS TO BE LEARNED. INHABITS THE NARROW COASTAL PLAINS FROM THE MEXICAN BORDER NORTH TO EL SEGUNDO, LOS ANGELES CO.

Hazard Class: FS, PP

PENINSULAR BIGHORN SHEEP



Scientific Name: OVIS CANADENSIS CREMNOBATES

Federal Status: Proposed Endangered

Species Description:

A large mammal up to 3 feet tall at the shoulder, males weighing up to 220 lbs, females to 140 lbs, both sexes with permanent horns, massive and coiled in the males, smaller and not coiled in the females, pelage white to dark brown with a white rump.

Photo: Tupper Ansel Blake

Habitat Description:

OPTIMAL HABITAT INCLUDES STEEP WALLED CANYONS AND RIDGES BISECTED BY ROCKY OR SANDY WASHES, WITH AVAILABLE WATER. OPEN DESERT SLOPES BELOW 4,000 FT ELEVATION FROM SAN GORGONIO PASS SOUTH INTO MEXICO.

Hazard Class: BB

RIVERSIDE FAIRY SHRIMP



Scientific Name: STREPTOCEPHALUS WOOTTONI

Federal Status: Endangered

Species Description:

1/2 to 1-1/2 inch crustaceans swimming upside down (ventral side up), adults have stalked compound eyes, two sets of antennae, and 11 pairs of leaf-like swimming legs. Coloration varies widely from orange to red, blue, gray or green due to food source.

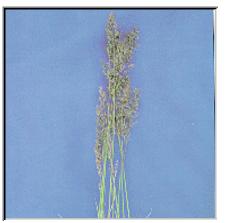
Photo: Guy Bruyea

Habitat Description:

INHABIT SEASONALLY ASTATIC POOLS FILLED BY WINTER/SPRING RAINS. HATCH IN WARM WATER LATER IN THE SEASON. ENDEMIC TO W RIVERSIDE & SAN DIEGO COS IN AREAS OF TECTONIC SWALES/EARTH SLUMP BASINS IN GRASSLAND & COASTAL SAGE SCRUB.

Hazard Class: AQ

SAN BERNARDINO BLUE GRASS



Scientific Name: POA ATROPURPUREA

Federal Status: Endangered

Species Description:

A tufted perennial with creeping rhizomes, erect, dense spike-like panicle (compound floral axis) 8 to 18 in high, flowers from early May to June, distinguished from Kentucky bluegrass in part by shorter inflorescences, contracted panicles.

Photo: "Weeds of the West"

Poa sp.

Habitat Description:

MESIC MEADOWS OF OPEN PINE FORESTS ND GRASSY SLOPES, LOAMY ALLUVIAL TO SANDY LOAM SOIL. 1350-2455M. MEADOWS AND SEEPS.

Hazard Class: PM

SAN DIEGO BUTTON-CELERY



Scientific Name: ERYNGIUM ARISTULATUM VAR PARISHII

Federal Status: Endangered

Species Description:

Basal rosette, white to purplish flowers, to 36 inches.

Photo: T. Oberbauer

Habitat Description:

SAN DIEGO MESA HARDPAN & CLAYPAN VERNAL POOLS & SOUTHERN INTERIOR BASALT FLOW VERNAL POOLS; USU SURR BY SCRUB. 15-620M. VERNAL POOLS, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND. IN CALIFORNIA, KNOWN ONLY FROM RIVERSIDE & SAN DIEGO CO'S.

Hazard Class: PD

SAN DIEGO FAIRY SHRIMP



Scientific Name: BRANCHINECTA SANDIEGONENSIS

Federal Status: Endangered

Species Description:

1/2 to 1-1/2 inch crustaceans swimming upside down (ventral side up), adults have stalked compound eyes, two sets of antennae, and 11 pairs of leaf-like swimming legs. Coloration varies widely from orange to red, blue, gray or green due to food source.

Photo: Brent Helm, Jones & Stokes

Branchinecta sp.

Habitat Description:

VERNAL POOLS. ENDEMIC TO SAN DIEGO COUNTY MESAS.

Hazard Class: AQ

SAN DIEGO THORN-MINT



Scientific Name: ACANTHOMINTHA ILICIFOLIA

Federal Status: Threatened

Species Description:

Annual to 6 inches, white to rose tinged flowers.

Photo: Gerald G. Weland

Habitat Description:

ENDEMIC TO ACTIVE VERTISOL CLAY SOILS OF MESAS & VALLEYS. USU ON CLAY LENSES W/IN GRASSLND OR CHAP COMMUNITIES. 10-935M. CHAPARRAL, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS. RESTRICTED ENDEMIC TO SAN DIEGO COUNTY AND BAJA.

Hazard Class: PD

SPREADING NAVARRETIA



Scientific Name: NAVARRETIA FOSSALIS

Federal Status: Threatened

Species Description:

A low, mostly spreading or ascending, annual herb, 4 to 6 inches tall with soft, finely divided leaves, 0.4 to 2 inches long, and spine-tipped when dry, the flowers are white to lavender white with linear petals.

Photo: Mark Elvin

Habitat Description:

SAN DIEGO HARDPAN & SAN DIEGO CLAYPAN VERNAL POOLS; IN SWALES & V.P'S, OFTEN SURR. BY OTHER HABITAT TYPES. 30-1300M. VERNAL POOLS, CHENOPOD SCRUB, MARSHES AND SWAMPS, PLAYAS. IN CALIFORNIA, KNOWN ONLY FROM RIVERSIDE AND SAN DIEGO CO.

Hazard Class: PD

STEPHENS' KANGAROO RAT



Scientific Name: DIPODOMYS STEPHENSI

Federal Status: Endangered

Species Description:

A dusky, cinnamon-buff colored mammal with large head and eyes, hip stripe, and tufted tail, head and body to 4-3/4 inches long with tail adding up to 7 inches, adults weigh about 65 grams.

Photo: B. "Moose" Peterson/WRP

Habitat Description:

PREFERS BUCKWHEAT, CHAMISE, BROME GRASS & FILAREE. WILL BURROW INTO FIRM SOIL PRIMARILY ANNUAL & PERENNIAL GRASSLANDS, BUT ALSO OCCURS IN COASTAL SCRUB & SAGEBRUSH WITH SPARSE CANOPY COVER.

Hazard Class: FS, KR

THREAD-LEAVED BRODIAEA



Scientific Name: BRODIAEA FILIFOLIA

Federal Status: Threatened

Species Description:

A perennial in the lilly family to 8 to 16 inches tall with several narrow leaves that are shorter than the leafless flower stalk, with violet flowers from May to June.

Photo: Brousseau Collection

Habitat Description:

USUALLY ASSOCIATED WITH ANNUAL GRASSLAND AND VERNAL POOLS; OFTEN SURR BY SHRUBLAND HABITATS. CLAY SOILS. 35-855M. CISMONTANE WOODLAND, COASTAL SCRUB, PLAYAS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.

Hazard Class: PM

TIDEWATER GOBY



Scientific Name: EUCYCLOGOBIUS NEWBERRYI

Federal Status: Endangered

Species Description:

A brackish water fish, rarely exceeding 2 inches in length, semitranslucent, gray to dark olive elongated body with dusky fins edged in cream, yellow or pale orange.

Photo: B. "Moose" Peterson/WRP

Habitat Description:

FOUND IN SHALLOW LAGOONS AND LOWER STREAM REACHES, THEY NEED FAIRLY STILL BUT NOT STAGNANT WATER & HIGH OXYGEN LEVELS.
BRACKISH WATER HABITATS ALONG THE CALIF COAST FROM AGUA HEDIONDA LAGOON, SAN DIEGO CO. TO THE MOUTH OF THE SMITH RIVER.

Hazard Class: AQ

UNARMORED THREESPINE STICKLEBACK



Scientific Name: GASTEROSTEUS ACULEATUS WILLIAMSONI

Federal Status: Endangered

Species Description:

A small, spindle-shaped fish with three angular spines along its back, and skin rather than scales, to 2-1/3 inches long, typically drab-olive color changes to pale blue and scarlet in the males.

Photo: B. "Moose" Peterson/WRP

Habitat Description:

COOL (<24 C), CLEAR WATER WITH ABUNDANT VEGETATION. WEEDY POOLS, BACKWATERS, AND AMONG EMERGENT VEGETATION AT THE STREAM EDGE IN SMALL SOUTHERN CALIFORNIA STREAMS.

Hazard Class: AQ

WESTERN SNOWY PLOVER



Scientific Name: CHARADRIUS ALEXANDRINUS NIVOSUS (NESTING)

Federal Status: Threatened

Species Description:

A shore bird with compact body, short neck, large eyes, dark legs and beak, dark partial neckband, males with black forehead and breast markings, females with dark brown markings. Calls include a low pitched "krut" and "ku-wheet."

Photo: Don Baccus

Habitat Description:

REQUIRES SANDY, GRAVELLY OR FRIABLE SOIL SUBSTRATE FOR NESTING. SANDY BEACHES ON MARINE AND ESTUARINE SHORES, ALSO SALT POND LEVEES AND THE SHORES OF LARGE ALKALI LAKES.

Hazard Class: AV

Sections	Species
08S01W: S34	Stephens' Kangaroo Rat
08S05W: S3,9-11,22-23,26	Thread-leaved Brodiaea
08S06W: S13	Encinitas Baccharis
08S06W: S19-20	Arroyo Toad
08S06W: S29	Thread-leaved Brodiaea
08S06W: S32	Stephens' Kangaroo Rat
08S07W: S35	Riverside Fairy Shrimp
09S01W: S3	Stephens' Kangaroo Rat
09S02W: S32	Least Bell's Vireo
09S03E: S27,34	Arroyo Toad
09S03W: S4-5,7-8	Least Bell's Vireo
09S04E: S1-2,11-14,24-25,36	Peninsular Bighorn Sheep
09S04W: S12,20	Least Bell's Vireo
09S04W: S25-27	Stephens' Kangaroo Rat
09S04W: S28	Least Bell's Vireo, Stephens' Kangaroo Rat
09S04W: S29,31	Least Bell's Vireo
09S04W: S32-33	Least Bell's Vireo, Stephens' Kangaroo Rat
09S04W: S34	Stephens' Kangaroo Rat
09S04W: S35	Least Bell's Vireo, Stephens' Kangaroo Rat
09S04W: S36	Stephens' Kangaroo Rat
09S04W: S5,8	Arroyo Toad
09S05E: S20	Least Bell's Vireo, Peninsular Bighorn Sheep
09S05E: S21	Peninsular Bighorn Sheep
09S05E: S22-23,25-26	Least Bell's Vireo, Peninsular Bighorn Sheep
09S05E: S27-28	Peninsular Bighorn Sheep
09S05E: S29-32	Least Bell's Vireo, Peninsular Bighorn Sheep
09S05E: S3-4	Peninsular Bighorn Sheep
09S05E: S33-36	Peninsular Bighorn Sheep
09S05E: S5-6	Least Bell's Vireo, Peninsular Bighorn Sheep
09S05E: S7-11,14-19	Peninsular Bighorn Sheep
09S05W: S25-26,28	Stephens' Kangaroo Rat
09S05W: S29	Thread-leaved Brodiaea
09S05W: S33	Least Bell's Vireo, Stephens' Kangaroo Rat
09S05W: S34	Stephens' Kangaroo Rat
09S05W: S35	Stephens' Kangaroo Rat, Thread-leaved Brodiaea
09S05W: S36	Thread-leaved Brodiaea
09S06W: S15	Thread-leaved Brodiaea
09S06W: S18	Tidewater Goby

Sections	Species	
09S06W: S19	California Least Tern	
09S06W: S22-23	Thread-leaved Brodiaea	
09S06W: S30	California Least Tern	
09S06W: S5	Thread-leaved Brodiaea	
09S06W: S6	Least Bell's Vireo	
09S07E: S1-3,11-14,23-25,36	Peninsular Bighorn Sheep	
09S07W: S10	Pacific Pocket Mouse	
09S07W: S11	Least Bell's Vireo, Pacific Pocket Mouse, Tidewater Goby	
09S07W: S13	Pacific Pocket Mouse, Tidewater Goby	
09S07W: S14	Least Bell's Vireo, Tidewater Goby	
09S07W: S15,23	Tidewater Goby	
09S07W: S2	Tidewater Goby	
09S07W: S24	California Least Tern, San Diego Fairy Shrimp, Tidewater Goby	
09S08E: S4-10,15-22,27-34	Peninsular Bighorn Sheep	
10S01E: S12	San Bernardino Blue Grass	
10S02E: S14-15,22-25,36	Stephens' Kangaroo Rat	
10S02E: S7	San Bernardino Blue Grass	
10S02W: S5-6,31	Least Bell's Vireo	
10S03E: S22	Arroyo Toad, Stephens' Kangaroo Rat	
10S03E: S23	Arroyo Toad	
10S03E: S26-35	Stephens' Kangaroo Rat	
10S03E: S9,15-17,19-21	Stephens' Kangaroo Rat	
10S03W: S1-2	Least Bell's Vireo	
10S03W: S10	Least Bell's Vireo	
10S03W: S11	Arroyo Toad	
10S03W:	Least Bell's Vireo	
S15-17,20-21,29-31,35-36		
10S03W: S9	Arroyo Toad, Least Bell's Vireo	
10S04W: S1-4	Stephens' Kangaroo Rat	
10S04W: S10-11,14-15	Stephens' Kangaroo Rat	
10S04W: S18,27-28,33-36	Least Bell's Vireo	
10S04W: S5	Least Bell's Vireo, Stephens' Kangaroo Rat	
10S04W: S6-8	Least Bell's Vireo	
10S05E: S1-4	Peninsular Bighorn Sheep	
10S05E: S22-23	Least Bell's Vireo, Peninsular Bighorn Sheep	
10S05E: S24	Peninsular Bighorn Sheep	
10S05E: S25	Desert Pupfish, Peninsular Bighorn Sheep	
10S05E: S26	Desert Pupfish, Least Bell's Vireo, Peninsular Bighorn Sheep	

Sections	Species
10S05E: S27,34	Peninsular Bighorn Sheep
10S05E: S35-36	Desert Pupfish, Peninsular Bighorn Sheep
10S05E: S5	Least Bell's Vireo, Peninsular Bighorn Sheep
10S05E: S6,8-17,20-21	Peninsular Bighorn Sheep
10S05W: S18	Least Bell's Vireo, Tidewater Goby
10S05W: S19	Least Bell's Vireo, San Diego Button-celery, Tidewater Goby
10S05W: S23-24,26	Least Bell's Vireo
10S05W: S27	San Diego Button-celery, Spreading Navarretia
10S05W: S30	San Diego Button-celery
10S05W: S31	California Least Tern, San Diego Button-celery, Tidewater Goby, Western Snowy Plover
10S05W: S34	San Diego Button-celery, Spreading Navarretia
10S05W: S35	Least Bell's Vireo
10S05W: S4-5,13-14	Least Bell's Vireo
10S06E: S30-31	Desert Pupfish
10S06W: S13	Least Bell's Vireo, San Diego Button-celery
10S06W: S14,23	San Diego Button-celery
10S06W: S24	Least Bell's Vireo, Light-footed Clapper Rail, San Diego Button-celery,
	Tidewater Goby
10S06W: S25	San Diego Button-celery
10S07E: S1	Peninsular Bighorn Sheep
10S08E: S4-6	Peninsular Bighorn Sheep
11S02E: S1,12	Stephens' Kangaroo Rat
11S02W: S6-7	Least Bell's Vireo
11S03E: S1-13,15-18,21-22,27	Stephens' Kangaroo Rat
11S03W: S1-2,11-12	Least Bell's Vireo
11S03W: S19-20,31	Thread-leaved Brodiaea
11S03W: S34-36	San Diego Button-celery, Spreading Navarretia
11S04E: S6-7	Stephens' Kangaroo Rat
11S04W: S1	Least Bell's Vireo
11S04W: S18	Least Bell's Vireo, Tidewater Goby
11S04W: S2	California Least Tern, Least Bell's Vireo, Light-footed Clapper Rail, Stephens' Kangaroo Rat
11S04W: S22-27	Thread-leaved Brodiaea
11S04W: S3	California Least Tern, Least Bell's Vireo, Light-footed Clapper Rail
11S04W: S31	California Least Tern, Light-footed Clapper Rail, Tidewater Goby
11S04W: S32	Least Bell's Vireo
11S04W: S33	Thread-leaved Brodiaea
11S04W: S4-6	Least Bell's Vireo

Sections	Species
11S04W: S7	Least Bell's Vireo, Tidewater Goby
11S04W: S8	Least Bell's Vireo
11S04W: S9,14-16	Thread-leaved Brodiaea
11S05E: S1-4,9	Peninsular Bighorn Sheep
11S05E: S10-11	Least Bell's Vireo, Peninsular Bighorn Sheep
11S05E: S12-14,21-36	Peninsular Bighorn Sheep
11S05W: S10	Least Bell's Vireo
11S05W: S11	Least Bell's Vireo, San Diego Button-celery
11S05W: S13	Least Bell's Vireo, Tidewater Goby
11S05W: S14	Least Bell's Vireo, San Diego Button-celery, Tidewater Goby
11S05W: S2	Least Bell's Vireo, San Diego Button-celery
11S05W: S22-23	Least Bell's Vireo, Tidewater Goby
11S05W: S3	Least Bell's Vireo
11S05W: S36	California Least Tern, Light-footed Clapper Rail, Tidewater Goby
11S05W: S5	Light-footed Clapper Rail, Tidewater Goby
11S05W: S8	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
11S05W: S9	California Least Tern, Coastal Dunes Milk-vetch, Light-footed Clapper Rail,
	Western Snowy Plover
11S06E: S19,29-33	Peninsular Bighorn Sheep
12S01E: S13,24	Least Bell's Vireo
12S01W: S24	Arroyo Toad
12S01W: S28	San Diego Thorn-mint
12S01W: S30-31,33-36	Least Bell's Vireo
12S02E: S18-19	Least Bell's Vireo
12S02W: S18	Del Mar Manzanita
12S02W: S31	Encinitas Baccharis
12S02W: S34-35	Least Bell's Vireo
12S02W: S6	San Diego Thorn-mint
12S03W: S1-2	San Diego Button-celery, Spreading Navarretia
12S03W: S11-12	San Diego Button-celery, Spreading Navarretia
12S03W: S15	San Diego Button-celery, San Diego Thorn-mint, Spreading Navarretia, Thread-leaved Brodiaea
12S03W: S16	Least Bell's Vireo, San Diego Button-celery, San Diego Thorn-mint, Spreading Navarretia, Thread-leaved Brodiaea
12S03W: S17	San Diego Thorn-mint, Thread-leaved Brodiaea
12S03W: S18	Del Mar Manzanita, San Diego Thorn-mint, Thread-leaved Brodiaea
12S03W: S19	San Diego Thorn-mint, Thread-leaved Brodiaea
12S03W: S20	Thread-leaved Brodiaea
12S03W: S24-25	Del Mar Manzanita

Sections	Species
12S03W: S3	San Diego Button-celery, Spreading Navarretia, Thread-leaved Brodiaea
12S03W: S31	San Diego Thorn-mint
12S03W: S36	Encinitas Baccharis
12S03W: S4,6-8	Thread-leaved Brodiaea
12S03W: S9-10	San Diego Button-celery, San Diego Thorn-mint, Spreading Navarretia, Thread-leaved Brodiaea
12S04E: S2-3	Least Bell's Vireo
12S04W: S10	San Diego Thorn-mint, Thread-leaved Brodiaea
12S04W: S12-13	Thread-leaved Brodiaea
12S04W: S14	Del Mar Manzanita, San Diego Thorn-mint
12S04W: S15	Del Mar Manzanita, Thread-leaved Brodiaea
12S04W: S17-18	Tidewater Goby, Western Snowy Plover
12S04W: S20	Spreading Navarretia
12S04W: S21	San Diego Thorn-mint
12S04W: S22	Del Mar Manzanita
12S04W: S23	Del Mar Manzanita, Thread-leaved Brodiaea
12S04W: S24	San Diego Thorn-mint, Thread-leaved Brodiaea
12S04W: S25	Thread-leaved Brodiaea
12S04W: S26	Del Mar Manzanita, Thread-leaved Brodiaea
12S04W: S27	Del Mar Manzanita
12S04W: S28	California Least Tern, Western Snowy Plover
12S04W: S29	Riverside Fairy Shrimp, Spreading Navarretia
12S04W: S33-34	California Least Tern, Western Snowy Plover
12S04W: S35	California Least Tern, Del Mar Manzanita, Western Snowy Plover
12S04W: S36	Del Mar Manzanita
12S04W: S4	Thread-leaved Brodiaea
12S04W: S7-8	Tidewater Goby, Western Snowy Plover
12S05E: S1-5,9-14	Peninsular Bighorn Sheep
12S05E: S22	Least Bell's Vireo
12S05E: S23	Least Bell's Vireo, Peninsular Bighorn Sheep
12S05E: S24-26	Peninsular Bighorn Sheep
12S05E: S27	Least Bell's Vireo
12S05E: S28	Unarmored Threespine Stickleback
12S05E: S36	Peninsular Bighorn Sheep
12S05W: S1	California Least Tern, Light-footed Clapper Rail, Tidewater Goby
12S06E: S17-18	Least Bell's Vireo, Peninsular Bighorn Sheep
12S06E: S19-36	Peninsular Bighorn Sheep
12S06E: S4-7	Peninsular Bighorn Sheep

Sections	Species
12S06E: S8	Least Bell's Vireo, Peninsular Bighorn Sheep
12S06E: S9,13-16	Peninsular Bighorn Sheep
12S07E: S19,29-32	Peninsular Bighorn Sheep
13S01E: S20-21	Spreading Navarretia
13S01W: S34	Encinitas Baccharis
13S02W: S10-11	Least Bell's Vireo
13S02W: S16,20-21	Encinitas Baccharis
13S02W: S2-3	Least Bell's Vireo
13S02W: S28	San Diego Thorn-mint
13S02W: S6-7,9	Encinitas Baccharis
13S03W: S1	Encinitas Baccharis
13S03W: S11-12	Encinitas Baccharis
13S03W: S23	Del Mar Manzanita
13S03W: S24	San Diego Thorn-mint
13S03W: S26	Spreading Navarretia
13S03W: S29-30	Del Mar Manzanita
13S03W: S31	Del Mar Manzanita, Encinitas Baccharis
13S03W: S35	San Diego Thorn-mint
13S03W: S6	San Diego Thorn-mint, Thread-leaved Brodiaea
13S03W: S7	Del Mar Manzanita, San Diego Thorn-mint
13S03W: S8	Thread-leaved Brodiaea
13S04W: S1	Del Mar Manzanita, Thread-leaved Brodiaea
13S04W: S10	Encinitas Baccharis, San Diego Thorn-mint
13S04W: S11	Del Mar Manzanita, Encinitas Baccharis
13S04W: S12	Del Mar Manzanita, Thread-leaved Brodiaea
13S04W: S13	Del Mar Manzanita
13S04W: S14	Del Mar Manzanita, Encinitas Baccharis
13S04W: S15	Encinitas Baccharis, San Diego Thorn-mint
13S04W: S2-3	Del Mar Manzanita, Encinitas Baccharis
13S04W: S23	Del Mar Manzanita, Encinitas Baccharis, Pacific Pocket Mouse, San Diego Thorn-mint
13S04W: S24	Del Mar Manzanita, Pacific Pocket Mouse, San Diego Thorn-mint
13S04W: S25	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
13S04W: S26	California Least Tern, Del Mar Manzanita, Light-footed Clapper Rail, Western Snowy Plover
13S04W: S27,34-35	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
13S04W: S36	Del Mar Manzanita
13S06E: S1-6,8-13	Peninsular Bighorn Sheep
13S07E: S3-10,16-18	Peninsular Bighorn Sheep

Sections	Species
14S01E: S4	San Diego Thorn-mint
14S01W:	San Diego Thorn-mint
S4-9,17-18,21-22,27-28,35	
14S02W: S15	Encinitas Baccharis
14S02W: S20	Del Mar Manzanita
14S02W: S21	San Diego Thorn-mint
14S02W: S22-23,26-29	Del Mar Manzanita
14S02W: S30	San Diego Thorn-mint
14S02W: S33-34	Del Mar Manzanita
14S03W: S13-15	San Diego Button-celery
14S03W: S17-20,22	Del Mar Manzanita
14S03W: S23-25	San Diego Button-celery
14S03W: S27	Del Mar Manzanita, San Diego Thorn-mint
14S03W: S29	San Diego Button-celery, San Diego Fairy Shrimp
14S03W: S30	Del Mar Manzanita, Encinitas Baccharis, San Diego Fairy Shrimp
14S03W: S31	Light-footed Clapper Rail, Western Snowy Plover
14S03W: S32,34-35	San Diego Button-celery
14S03W: S7-8	Del Mar Manzanita
14S04W: S1	Del Mar Manzanita
14S04W: S11	California Least Tern, Del Mar Manzanita, Western Snowy Plover
14S04W: S12-13	California Least Tern, Del Mar Manzanita
14S04W: S14	Del Mar Manzanita, Western Snowy Plover
14S04W: S2	California Least Tern, Del Mar Manzanita
14S04W: S23	Del Mar Manzanita, Light-footed Clapper Rail, Western Snowy Plover
14S04W: S24	Del Mar Manzanita
14S04W: S25	Coastal Dunes Milk-vetch, Del Mar Manzanita, Light-footed Clapper Rail, Western Snowy Plover
14S04W: S26	Coastal Dunes Milk-vetch, Light-footed Clapper Rail, Western Snowy Plover
14S04W: S35	Coastal Dunes Milk-vetch
14S04W: S36	Coastal Dunes Milk-vetch, Del Mar Manzanita, Light-footed Clapper Rail, Western Snowy Plover
14S05E: S1	Least Bell's Vireo
14S05E: S27-29,32-34	San Bernardino Blue Grass
14S06E: S6,10	Least Bell's Vireo
14S07E: S18-19	Least Bell's Vireo
14S07E: S25,36	Desert Pupfish
15S01E: S25	Encinitas Baccharis
15S01E: S7,18	Least Bell's Vireo
15S01W: S13,28-30	Least Bell's Vireo

Sections	Species
15S01W: S2	San Diego Thorn-mint
15S02E: S23-26,34	San Diego Thorn-mint
15S02W: S19	California Orcutt Grass, San Diego Button-celery
15S02W: S20	San Diego Button-celery, San Diego Fairy Shrimp
15S02W: S21	San Diego Fairy Shrimp
15S02W: S24-25	Least Bell's Vireo
15S02W: S27	San Diego Thorn-mint
15S02W: S28	San Diego Fairy Shrimp
15S02W: S29	San Diego Button-celery
15S02W: S30	California Orcutt Grass, San Diego Button-celery, Spreading Navarretia
15S02W: S31	San Diego Button-celery, Spreading Navarretia
15S02W: S34	Least Bell's Vireo, San Diego Thorn-mint
15S02W: S35	Least Bell's Vireo
15S02W: S4	San Diego Fairy Shrimp
15S02W: S5	Riverside Fairy Shrimp, San Diego Button-celery, San Diego Fairy Shrimp
15S02W: S7-8,17-18	San Diego Button-celery
15S03E: S13-14	Least Bell's Vireo
15S03E: S16,21	San Diego Thorn-mint
15S03E: S23-26	Least Bell's Vireo
15S03E: S30	San Diego Thorn-mint
15S03W: S1-2	San Diego Button-celery
15S03W: S10	Otay Mesa Mint, San Diego Button-celery, Spreading Navarretia
15S03W: S11	Otay Mesa Mint, San Diego Button-celery
15S03W: S12-13	San Diego Button-celery
15S03W: S14	San Diego Button-celery, San Diego Fairy Shrimp
15S03W: S15	San Diego Button-celery, Spreading Navarretia
15S03W: S16	San Diego Fairy Shrimp
15S03W: S23	San Diego Button-celery, San Diego Fairy Shrimp
15S03W: S24-25	San Diego Button-celery
15S03W: S36	San Diego Button-celery, Spreading Navarretia
15S03W: S5	Light-footed Clapper Rail, Western Snowy Plover
15S03W: S6	Del Mar Manzanita, Light-footed Clapper Rail, Western Snowy Plover
15S03W: S9	San Diego Button-celery, San Diego Fairy Shrimp
15S04E: S12-13	Arroyo Toad
15S04E: S18-20	Least Bell's Vireo
15S04E: S24-26	Arroyo Toad
15S04E: S30	Least Bell's Vireo
15S04E: S36	Arroyo Toad

Sections	Species
15S04W: S1	Coastal Dunes Milk-vetch, Del Mar Manzanita
15S05E: S18,31	Arroyo Toad
15S05E: S3-4,15	San Bernardino Blue Grass
15S07E: S33-36	Peninsular Bighorn Sheep
15S08E: S31	Peninsular Bighorn Sheep
16S01E: S26-27	San Diego Thorn-mint
16S01E: S29,31	Least Bell's Vireo
16S01E: S34	San Diego Thorn-mint
16S01W: S19	San Diego Thorn-mint
16S01W: S20-21	Least Bell's Vireo, San Diego Thorn-mint
16S01W: S22,26	Least Bell's Vireo
16S01W: S28-33	San Diego Thorn-mint
16S01W: S35-36	Least Bell's Vireo
16S01W: S8-9,15-17	Least Bell's Vireo
16S02E: S11	Arroyo Toad, Least Bell's Vireo
16S02E: S18-19	Least Bell's Vireo
16S02W: S17-18	Least Bell's Vireo, San Diego Thorn-mint
16S02W: S19	Least Bell's Vireo, Otay Mesa Mint, San Diego Thorn-mint
16S02W: S2-3	Least Bell's Vireo, San Diego Thorn-mint
16S02W: S20	Least Bell's Vireo, San Diego Thorn-mint
16S02W: S21-22	San Diego Button-celery, San Diego Thorn-mint
16S02W: S23-24	San Diego Thorn-mint
16S02W: S30-31	Otay Mesa Mint, San Diego Thorn-mint
16S02W: S34	San Diego Button-celery
16S02W: S35	San Diego Button-celery, San Diego Fairy Shrimp
16S02W: S5	San Diego Fairy Shrimp
16S02W: S6	San Diego Button-celery, Spreading Navarretia
16S02W: S7	Least Bell's Vireo
16S02W: S8	San Diego Fairy Shrimp, San Diego Thorn-mint
16S02W: S9-11,13-16	San Diego Thorn-mint
16S03E: S23,34	Least Bell's Vireo
16S03W: S1	San Diego Button-celery, Spreading Navarretia
16S03W: S12	Least Bell's Vireo
16S03W: S13	Least Bell's Vireo, San Diego Button-celery
16S03W: S14	Otay Mesa Mint, San Diego Button-celery, San Diego Thorn-mint
16S03W: S15	Least Bell's Vireo, Otay Mesa Mint, San Diego Thorn-mint
16S03W: S17	California Least Tern
16S03W: S20	Light-footed Clapper Rail

Sections	Species
16S03W: S21	Light-footed Clapper Rail, Otay Mesa Mint, San Diego Thorn-mint
16S03W: S22-23	Otay Mesa Mint, San Diego Thorn-mint
16S03W: S24	Least Bell's Vireo, Otay Mesa Mint, San Diego Thorn-mint
16S03W: S25-26	Otay Mesa Mint, San Diego Thorn-mint
16S03W: S27	California Least Tern, Otay Mesa Mint, San Diego Thorn-mint, Western Snowy Plover
16S03W: S28	California Least Tern, Light-footed Clapper Rail, Otay Mesa Mint, San Diego Thorn-mint, Western Snowy Plover
16S03W: S29	Light-footed Clapper Rail, Western Snowy Plover
16S03W: S32-34	California Least Tern, Western Snowy Plover
16S03W: S35	California Least Tern, Otay Mesa Mint
16S03W: S36	Otay Mesa Mint, San Diego Thorn-mint
16S03W: S7	Light-footed Clapper Rail
16S03W: S8	California Least Tern
16S04W: S24-25	California Least Tern
16S05E: S17,20	Least Bell's Vireo
16S07E: S1-5,8-16,21-28,35-36	Peninsular Bighorn Sheep
16S08E: S5-9,16-21,29-32	Peninsular Bighorn Sheep
17S01E: S17	San Diego Button-celery
17S01E: S31	San Diego Thorn-mint
17S01E: S33-34	Least Bell's Vireo
17S01W: S1	Least Bell's Vireo
17S01W: S10	Least Bell's Vireo, San Diego Thorn-mint
17S01W: S11	Least Bell's Vireo
17S01W: S15	Otay Tarplant
17S01W: S16	Otay Tarplant, San Diego Thorn-mint, Spreading Navarretia
17S01W: S17	Otay Tarplant, San Diego Thorn-mint
17S01W: S18	Otay Tarplant
17S01W: S19	San Diego Thorn-mint
17S01W: S2	Least Bell's Vireo, Otay Tarplant
17S01W: S20	Otay Tarplant
17S01W: S21	Otay Tarplant, Spreading Navarretia
17S01W: S22-23,25-29	Otay Tarplant
17S01W: S3	Least Bell's Vireo, San Diego Thorn-mint
17S01W: S30	San Diego Thorn-mint
17S01W: S31	Otay Tarplant, San Diego Thorn-mint
17S01W: S32	Otay Tarplant
17S01W: S4-5	San Diego Thorn-mint
17S01W: S8	Otay Tarplant, San Diego Thorn-mint

Sections	Species
17S01W: S9	Least Bell's Vireo, Otay Tarplant, San Diego Thorn-mint
17S02W: S15-16,21-26	San Diego Thorn-mint
17S02W: S27-28	Light-footed Clapper Rail, San Diego Thorn-mint
17S02W: S29	Light-footed Clapper Rail
17S02W: S32	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
17S02W: S33	Light-footed Clapper Rail
17S02W: S34	Least Bell's Vireo, Light-footed Clapper Rail
17S02W: S35	Least Bell's Vireo, San Diego Thorn-mint
17S02W: S36	San Diego Thorn-mint
17S02W: S6	Otay Mesa Mint
17S03E: S2-3	Least Bell's Vireo
17S03W: S1	Otay Mesa Mint
17S03W: S18,20-21	Western Snowy Plover
17S03W: S2	California Least Tern, Otay Mesa Mint
17S03W: S22-23	Coastal Dunes Milk-vetch
17S03W: S26	California Least Tern, Coastal Dunes Milk-vetch
17S03W: S3-4	California Least Tern, Western Snowy Plover
17S03W: S35-36	Coastal Dunes Milk-vetch
17S03W: S5,7	Western Snowy Plover
17S03W: S8-9,16-17	California Least Tern, Western Snowy Plover
17S04E: S18-19,21-22,26-27	Least Bell's Vireo
17S05E: S8	Arroyo Toad
17S07E: S1-2,11-12	Peninsular Bighorn Sheep
17S08E: S6-7	Peninsular Bighorn Sheep
18S01E: S18	Least Bell's Vireo, Otay Mesa Mint, San Diego Button-celery
18S01E: S29-31	Otay Tarplant
18S01E: S3-4	Least Bell's Vireo
18S01E: S6	San Diego Thorn-mint
18S01E: S7-8	San Diego Button-celery
18S01W: S1-2,7	Otay Tarplant
18S01W: S13	Least Bell's Vireo, Otay Mesa Mint, Otay Tarplant, San Diego Button-celery
18S01W: S16	Otay Tarplant
18S01W: S17	Otay Tarplant, Spreading Navarretia
18S01W: S18	Otay Tarplant
18S01W: S19	Least Bell's Vireo, Otay Tarplant
18S01W: S20-21	Otay Tarplant
18S01W: S22	California Orcutt Grass, Otay Mesa Mint, Otay Tarplant, Riverside Fairy Shrimp, San Diego Button-celery, San Diego Fairy Shrimp

Sections	Species
18S01W: S23	Otay Mesa Mint, Otay Tarplant, Riverside Fairy Shrimp, San Diego Button-celery, San Diego Fairy Shrimp
18S01W: S24	Otay Mesa Mint, San Diego Button-celery, San Diego Fairy Shrimp
18S01W: S25	San Diego Button-celery, Spreading Navarretia
18S01W: S26	Otay Mesa Mint, Riverside Fairy Shrimp, San Diego Button-celery, San Diego Fairy Shrimp
18S01W: S27	California Orcutt Grass, Otay Mesa Mint, Otay Tarplant, Riverside Fairy Shrimp, San Diego Button-celery, San Diego Fairy Shrimp
18S01W: S28	Otay Tarplant
18S01W: S29	Otay Mesa Mint, Otay Tarplant, San Diego Button-celery, Spreading Navarretia
18S01W: S30	Otay Tarplant, San Diego Button-celery, Spreading Navarretia
18S01W: S31	San Diego Button-celery, Spreading Navarretia
18S01W: S32	Otay Mesa Mint, Spreading Navarretia
18S01W: S34	California Orcutt Grass, Otay Mesa Mint, Otay Tarplant, San Diego Button-celery, Spreading Navarretia
18S01W: S35	California Orcutt Grass, Otay Mesa Mint, Spreading Navarretia
18S01W: S8	Otay Tarplant, Spreading Navarretia
18S02W: S13-14	Otay Tarplant
18S02W: S16	Light-footed Clapper Rail, Western Snowy Plover
18S02W: S17	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
18S02W: S18-19	Light-footed Clapper Rail, Western Snowy Plover
18S02W: S20	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
18S02W: S21	Light-footed Clapper Rail, Western Snowy Plover
18S02W: S23-26	Otay Tarplant
18S02W: S30	Light-footed Clapper Rail
18S02W: S31	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
18S02W: S32	Light-footed Clapper Rail
18S02W: S33-35	Least Bell's Vireo
18S02W: S36	San Diego Button-celery
18S02W: S5	California Least Tern, Light-footed Clapper Rail, Western Snowy Plover
18S02W: S7	Western Snowy Plover
18S02W: S9	Light-footed Clapper Rail, Western Snowy Plover
18S03E: S18	Arroyo Toad
18S03W: S12	Western Snowy Plover
18S05E: S16-21	Least Bell's Vireo
19S01E: S6	Otay Tarplant
19S01W: S3	California Orcutt Grass, Otay Mesa Mint, San Diego Button-celery, Spreading Navarretia
19S01W: S5	California Orcutt Grass, San Diego Button-celery

Sections	Species
19S01W: S6	California Orcutt Grass, San Diego Button-celery, Spreading Navarretia
19S02W: S1-4	Least Bell's Vireo
19S02W: S5	Least Bell's Vireo, Light-footed Clapper Rail
19S02W: S6-7	Light-footed Clapper Rail